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Ai Cover sheet

I confirm that I have not presented any AI generated text as my own work, I confirm I have copies of my drafts, notes and other resources I used before, and after use of AI tools which I may be asked to provide in evidence

Script

Section one focuses on a small, forested area close to my home, a space rich in trees, a flowing river, abundant wildlife, and endless opportunities for exploration, creativity, and developmental growth. This kind of natural environment exemplifies the principles of early childhood education for sustainability because it offers children direct, embodied encounters with ecological systems, supporting relational learning and a deep sense of *Cynefin*—their belonging to place, community, and nature (Welsh Government, 2020). In this woodland, children can observe seasonal change, follow the movement of water, listen to birdsong, and notice the interdependence of plants, insects, and animals, experiences that research identifies as foundational for developing ecological identity and pro-environmental dispositions (Chawla, 2020; Wilson, 2012). The river provides a dynamic context for inquiry, enabling children to explore flow, texture, sound, and cause-and-effect, while the trees and undergrowth offer spaces for imaginative play, problem-solving, and creative expression—key elements of holistic sustainability learning (Davis, 2015; Somerville & Green, 2015). Wildlife encounters in this setting encourage empathy and ethical reasoning, supporting the development of informed, responsible citizens as outlined in the Four Purposes of the Curriculum for Wales. Importantly, this forest area embodies the Welsh Government’s emphasis on outdoor, place-responsive learning within the ECPLC Quality Framework (Welsh Government, 2023), demonstrating how everyday local environments can become powerful sites for nurturing curiosity, wellbeing, and sustainable thinking in the early years.

Today I want to explore how experiences such as water exploration, wildlife encounters, and hands-on science provocations can meaningfully support early childhood education for sustainability. My central argument is that sustainability in the early years is not achieved through themed weeks or abstract teaching, but through embodied, relational, and place-based encounters that shape children’s identities, values, and dispositions. This perspective is strongly supported in the international literature (Davis, 2015; Elliott & Årlemalm-Hagsér, 2019) and aligns

closely with the Curriculum for Wales, which positions children as curious, ethical, and active participants in their environments (Welsh Government, 2020).

Experiences with water provide a powerful entry point into sustainability learning because water is dynamic, unpredictable, and deeply connected to ecological systems. When children explore puddles, streams, rainwater, or ponds, they encounter concepts such as flow, change, interdependence, and cycles. These experiences promote systems thinking, a core sustainability competency, because children observe how water connects living things, habitats, and weather patterns (Somerville & Green, 2015). Water also offers rich opportunities for embodied learning, where sensory engagement deepens children's emotional connection to place—an essential foundation for long-term pro-environmental behaviour (Chawla, 2020). In Wales, this resonates strongly with the concept of *Cynefin*, which emphasises belonging, identity, and connection to the local environment.

However, water experiences can become decontextualised when limited to indoor trays or adult-directed activities. Such approaches risk reducing sustainability to a theme rather than a lived relationship. Authentic, outdoor water encounters—such as observing seasonal changes in local rivers or collecting rainwater—support the Welsh Government's emphasis on place-responsive learning and children's right to experience nature as part of their everyday lives (Welsh Government, 2023). These experiences also align with the Science & Technology AoLE, which encourages inquiry, observation, and understanding of natural processes. The critical challenge for practitioners is balancing safety with authenticity; over-sanitising water play removes the very qualities that make it meaningful for sustainability learning.

Wildlife encounters offer another rich pathway into sustainability education. Observing insects, birds, amphibians, or mammals encourages children to recognise themselves as part of a shared ecosystem, developing dispositions of empathy, care, and responsibility (Wilson, 2012). Research shows that early encounters with wildlife foster emotional connection and moral development, which are essential for sustainable citizenship (Chawla & Derr, 2012). In Wales, this aligns with the Four Purposes—particularly the aim of developing ethical, informed citizens who understand their impact on the natural world. Wildlife experiences also support slow,

attentive pedagogy, where children learn to notice, wonder, and question—key elements of sustainability learning.

Yet wildlife encounters can unintentionally reinforce anthropocentric attitudes if framed through collecting, controlling, or owning animals. These practices risk positioning nature as an object rather than a relational partner. ECEfS requires reciprocal, respectful encounters that emphasise non-intrusive observation and care (Ärlemalm-Hagsér, 2013). This aligns with Welsh policy frameworks such as the Early Childhood Play, Learning and Care (ECPLC) Quality Framework, which emphasises children's relationships with the more-than-human world and the importance of nurturing empathy and wellbeing through nature-based experiences (Welsh Government, 2023). Critically, one-off wildlife encounters are insufficient; sustained, seasonal engagement with local species is essential for building ecological identity.

Hands-on science provocations—such as testing water quality, identifying species, or observing habitats—support sustainability by promoting inquiry, critical thinking, and systems understanding. These experiences help children make sense of ecological processes, develop early scientific reasoning, and recognise human impact on natural environments (Siraj-Blatchford et al., 2010). Science-rich outdoor learning aligns with the Curriculum for Wales' emphasis on authentic, real-world inquiry, enabling children to ask questions, investigate phenomena, and construct meaning through active participation. When children engage in ecological science, they begin to understand sustainability not as a distant concept but as something that shapes their everyday lives.

However, science experiences can become instrumental if children simply collect data for adult-driven projects. This risks reducing sustainability to technical tasks rather than holistic learning. ECEfS requires science that is co-constructed, playful, and connected to children's own questions (Elliott & Davis, 2020). Over-scientising nature can also diminish emotional and ethical engagement, which are essential components of sustainability learning. A balanced approach—integrating inquiry with care, curiosity, and relational understanding—is therefore necessary. In Wales, this balance is supported by the Curriculum for Wales' holistic orientation, which integrates cognitive, emotional, social, and physical development.

Taken together, water, wildlife, and science experiences embody the philosophy of early childhood education for sustainability by positioning children as active participants in sustainability, cultivating relational ontologies, and developing ethical dispositions of care and responsibility. These experiences strengthen children's sense of *Cynefin*—their belonging to place, community, and environment—which is a core concept in Welsh education. They also support the Four Purposes by developing healthy, confident individuals, ethical citizens, and ambitious learners who understand their role in sustaining the natural world.

ECEfS literature emphasises that sustainability learning must be holistic, experiential, and relational, integrating emotional, social, cognitive, and physical development (Davis & Elliott, 2014). Welsh policy frameworks reinforce this by positioning outdoor learning as central to wellbeing, identity, and environmental stewardship. Water, wildlife, and science experiences therefore provide powerful, research-supported pathways for embedding sustainability meaningfully within early childhood practice in Wales. They allow children not only to learn about sustainability but to live it, forming the foundations for a more ecologically responsible future.

Reference list

- Ärlemalm-Hagsér, E. (2013) 'A research review of ECEfS: International perspectives', *International Journal of Early Childhood*, 45(2), pp. 207–226.
- Chawla, L. (2020) 'Childhood nature connection and pro-environmental behaviour', *People and Nature*, 2(3), pp. 921–939.
- Chawla, L. and Derr, V. (2012) 'The development of conservation behaviours in childhood and youth', in Clayton, S. (ed.) *The Oxford Handbook of Environmental and Conservation Psychology*. Oxford: Oxford University Press, pp. 527–555.
- Davis, J. (2015) *Young Children and the Environment: Early Education for Sustainability*. 2nd edn. Cambridge: Cambridge University Press.
- Davis, J. and Elliott, S. (2014) *Research in Early Childhood Education for Sustainability: International Perspectives and Provocations*. London: Routledge.
- Elliott, S. and Ärlemalm-Hagsér, E. (2019) 'Practices and principles of early childhood education for sustainability', *European Early Childhood Education Research Journal*, 27(4), pp. 1–15.
- Siraj-Blatchford, J., Smith, K. and Samuelsson, I.P. (2010) *Education for Sustainable Development in Early Childhood*. Göteborg: World Organisation for Early Childhood Education (OMEP).
- Somerville, M. and Green, M. (2015) *Children, Place and Sustainability*. London: Palgrave Macmillan.
- The Silent Watcher. (2023) *Forest River - Stream Sounds for Sleeping - No Birds - Relaxing Nature Video - Water Flowing 10 Hour*. Available at: <https://www.youtube.com/watch?v=2UxbnP-6ZIM> (Accessed 13th July 2026)
- Welsh Government (2020) *Curriculum for Wales Guidance*. Cardiff: Welsh Government.
- Welsh Government (2023) *Early Childhood Play, Learning and Care (ECPLC) Quality Framework*. Cardiff: Welsh Government.
- Wilson, R. (2012) *Nature and Young Children: Encouraging Creative Play and Learning in Natural Environments*. London: Routledge.